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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/875,369	06/05/2001	Kengo Ochi	2309/0J434	7467

7590 10/16/2003

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EXAMINER	
SMITH, KIMBERLY S	

ART UNIT	PAPER NUMBER
3644	

DATE MAILED: 10/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/875,369	OCHI ET AL.	
	Examiner	Art Unit	
	Kimberly S Smith	3644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 August 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05 June 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Arguments

1. The rejection under 35 U.S.C. § 112, First Paragraph has been withdrawn from the record in response to the evidence presented by the Applicant's submission. As such, the term α-starch has been recognized to be a pre-gelatinized starch.

2. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

3. Regarding the applicant's statement that McPherson teaches the use of an unmodified starch. It is noted that the McPherson reference is not relied upon for the invention disclosed therein, the reference is merely cited for showing that in prior art litters, the use of a pre-gelatinized starch is known and therefore would be a known material to those having ordinary skill in the art.

4. Regarding the applicant's assertion that fiber ground into a powder is not the same as a fiber. This is not found persuasive. The chemical composition of the fiber is not modified upon the changing from a length of fiber to a powder of fiber. It is questioned as to what limitation the Applicant would put upon the definition of a powder with regards to the limitation of size. The Applicant's have claimed that the mean fiber length can be as small as 0.02mm which may be construed as being a powder as no definitive terminology on fiber length with regards to what constitutes a powder or a fiber have been positively defined.

5. Regarding the discussion of the Chikazawa reference. It is noted that the applicant is correct that Chikazawa does not disclose tapioca being an alpha starch. However, this reference was merely relied upon to show that tapioca is a known starch in the art of animal litters. As such, it is considered to be within the skill of an artisan in the art to look towards tapioca when determining a starch to pre-gelatinize for use in litters.

Specification

6. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: claim 13 recites the terminology "pregelatinized starch". This terminology is not located in the specification and therefore the specification does not provide proper antecedent basis for limitation.

Claim Rejections - 35 USC § 103

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 1-5 and 7-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasahara, JP 11-032608 in view of McPherson et al., US Patent 6,405,677 (McPherson).

Sasahara discloses an animal excretion-treating material comprising particles having a core layer of fibers and a skin layer containing starch (i.e. a known water absorbing polymer powder) and fibers (paragraph 0010). However, Sasahara does not positively disclose the use of alpha-starches. McPherson teaches within the same field of endeavor that the use of α-starch

(i.e. pre-gelatinized starches) as the starch component of litter to effect adhesion between particles. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use alpha-starch, since it has been held to be within the general skill of a worker in the art to select a known material (reference McPherson, column 4, lines 54-56 stating that prior art litters employ modified, pre-gelatinized starches) on the basis of its suitability for the intended use (i.e. for the adhesion of particles to each other) as a matter of obvious design choice.

Sasahara further discloses the fibers in the core layer and skin layer are those of pulp; wherein the bulk density falls between 0.1 and 0.5 (paragraph 0026); wherein the particle has a diameter between 2 and 20 mm (paragraph 0009).

Regarding claim 4, Sasahara as modified discloses the skin layer in a ratio of alpha starch to fiber in a range of 20 to 80 and 80 to 20 (i.e. paragraph [0009] states a 1 to 2 ratio to which a range of 33.3 and 66.6 would fall within the claimed range while maintaining the disclosed ratio).

Regarding claims 2 and 3, Sasahara discloses the invention substantially as claimed. However, Sasahara does not positively disclose that the skin layer fibers have a length between .02 to 1 mm or that the particle size of the starch in the skin layer is at most .25mm. It would have been obvious to one having ordinary skill in the art at the time the invention was made to find the optimal values of the fiber length and the particle size, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

Regarding claims 10 and 13, Sasahara as modified further discloses the material being flushable in a toilet (paragraph [0029] of Sasahara).

Regarding claim 11, Sasahara as modified discloses the alpha starch being contained only in the skin layer.

Regarding claim 12, Sasahara as modified is considered to be biodegradable in a septic tank as it is merely composed of fiber and starches. Further regarding claim 12, reference discussion of claims 2 and 4 above.

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sasahara in view of McPherson et al., as applied to claim 1 above, and further in view of Chikazawa, US Patent 5,209,185.

Sasahara as modified discloses the invention substantially as claimed. However, Sasahara does not disclose the starch being tapioca. Chikazawa teaches within the same field of endeavor the use of tapioca as a starch in an artificial litter. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use tapioca as a starch for pre-gelatinization as taught by Sasahara as modified, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly S Smith whose telephone number is 703-308-8515. The examiner can normally be reached on Monday thru Friday 10:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles T Jordan can be reached on 703-306-4159. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-5771.

kss

Charles T. Jordan
CHARLES T. JORDAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600